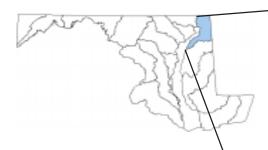


Elk River Basin

Current Status of Wadeable Streams

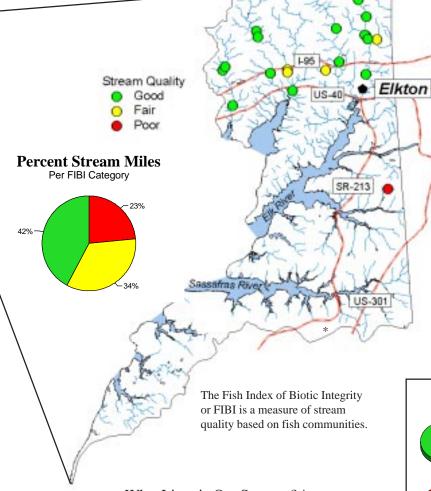


Where is the Elk River Basin?

The basin drains into the northeastern portion of the Chesapeake Bay from Cecil and Kent counties, Maryland. Portions of the basin drain from Pennsylvania and Delaware. The Elk River basin includes the watersheds of the Elk, Sassafras, North East, and Bohemia Rivers.



The Elk River basin offers a number of beautiful scenic areas.

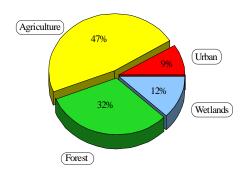


What Lives in Our Streams? *

Estimated Fish Abundance:	2.2 million
Number of Fish Species:	42
Number of Gamefish Species:	5
Number of Reptile and Amphibian Specie	s: 11
Number of Freshwater Mussel Species:	2

*Based on collections if the Maryland Biological Stream Survey in wadable streams basin-wide during 1996.

Land Use in the Basin



Land use in the basin is primarily rural, however urbanization is occurring at a moderate pace. The basin drains an area of 440 square miles and the current population is approximately 160 people per square mile. This number is expected to increase by 22% in the next 20 years.



Water Quality



Oxygen - All of the streams in the basin had oxygen levels that met the state water quality standard of 5 mg/L.



Nitrate - 56% of the streams had nitrate levels that may affect aquatic life (>1 mg/L). The main sources of nitrates are farm fertilizers and acid



Buffering Capacity - 22% of the stream miles in the basin are only moderately buffered against acid rain.



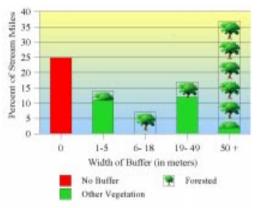
Good



Poor

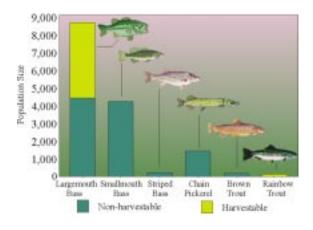
Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Elk River basin are in fair to poor condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



Gamefish

Six species of gamefish were collected in the basin. The only gamefish of legal harvestable size were largemouth bass and rainbow trout. It appears that the wadeable tributaries in this basin serve as a nursery for these gamefish species.





Did You Know???



- ♦ The basin has an outstanding diversity of wetlands, with 33 distinct plant community types recognized. Among these is the Maryland bur-marigold, a threatened species of global concern.
- ♦ Turkey Point, on the Elk River, is home to an isolated but important light house. The Turkey Point Light had the most women keepers of any lighthouse on the Bay.
- ♦ We may be losing an important part of our natural heritage. At present there is at least one fish species in the basin at risk of local elimination: logperch.



The logperch, highly rare in Maryland, is found in the Elk River basin.

Community Involvement

Want to help? These community groups can show you how!

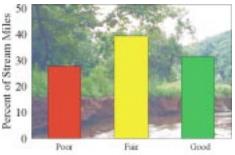
Alliance for the Chesapeake Bay 6600 York Road, Suite 100 Baltimore, MD 21212 Kathleen Millan (410) 377-6270

South Cecil County Committee and Watershed Association One Middlebrook Road Warwick, MD 21912 Robert Walker (410) 398-7797



Stream Bank Stability

Eroded, unstable stream banks reduce habitat quality and contribute to water quality problems in downstream areas. On average, stream bank stability in the basin is fair. As lands within the basin were developed for agriculture and later urbanized, some stream banks became highly eroded. Since streams in the basin flow into the Chesapeake Bay, this bank instability causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



Stream Bank Condition

Recreation

The basin offers a variety of recreational activities for residents and visitors, including Fair Hill Natural Resource Management Area, Elk Neck State Forest, and Elk Forest Wildlife Management Area. Popular activites include hunting, fishing, moutain biking, horseback riding, swimming, hiking, and picnicking.



Two girls enjoy an afternoon at Northeast Creek, located in the Elk River basin.

For more detailed information on streams in the Bush River basin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8611 or email asmith@dnr.state.md.us.